ABSTRACT

FACE DETECTION

5   A face detection apparatus for tracking a detected face between images in a video sequence comprises:

a first face detector for detecting the presence of face(s) in the images;

a second face detector for detecting the presence of face(s) in the images;

the first face detector having a higher detection threshold than the second face

10   detector, so that the second face detector is more likely to detect a face in an region in which the first face detector has not detected a face; and

a face position predictor for predicting a face position in a next image in a test order of the video sequence on the basis of a detected face position in one or more previous images in the test order of the video sequence;

15   in which:

if the first face detector detects a face within a predetermined threshold image distance of the predicted face position, the face position predictor uses the detected position to produce a next position prediction;

if the first face detector fails to detect a face within a predetermined threshold image distance

20   of the predicted face position, the face position predictor uses a face position detected by the second face detector to produce a next position prediction.

Figure 14.